Fall 10-24-2014

The Regional Economic Analysis of Clinton County Ohio

Chadwick W. McKay
cwmckay@siu.edu

THE REGIONAL ECONOMIC ANALYSIS OF CLINTON COUNTY OHIO

by

Chad McKay

B.S., Wilmington College, 2013

A Research Paper

Submitted in Partial Fulfillment of the Requirements for the

Master of Science

Department of Agribusiness Economics

Southern Illinois University Carbondale

December 2014

RESEARCH PAPER APPROVAL

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Approved by:

Ira Altman

Graduate School
Southern Illinois University Carbondale
October 24, 2014

AN ABSTRACT OF THE RESEARCH PAPER OF

CHAD MCKAY, for the Masters of Science degree in AGRIBUSINESS ECONOMICS,

TITLE: THE REGIONAL ECONOMIC ANALYSIS OF CLINTON COUNTY OHIO

MAJOR PROFESSOR: Dr. IRA J. ALTMAN

Since 2008, the United States of America has been rebuilding itself from what has become known as the Great Recession. No matter what region of the globe is being studied, the recession has had a profound impact. For Clinton County Ohio, the impacts have been truly detrimental. With one particular employer departing from the region, the community still finds itself searching for employment, opportunity and hope. To better understand and draw conclusions on what this county faces, economic history as well as various economic sectors, must be reviewed to determine the economic analysis of Clinton County.

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CHAPTER I

TOPIC INTRODUCTION

Clinton County is a small rural county located in southwestern Ohio with a population of just under 42,000 people. Economic conditions for Clinton County are very troublesome. One of the largest employers, DHL, relocated in 2009 to northern Kentucky and withdrew over 8,000 jobs from Clinton County. DHL was a shipping hub located on an old military base in Wilmington, Ohio, which is located in Clinton County. Since 2009, citizens have either relocated to find work elsewhere or taken jobs from new small companies, businesses, and firms that are located in Clinton County. To this day, Clinton County is nowhere close to the employment level it was before DHL departed.

Prior to 2008, DHL was Clinton County's largest employer. When DHL decided to move their base of operations in 2008, Mayor David L. Raizk was quoted, "20% of the region's businesses depended on the hub…this was a catastrophic event for the entire region".

CHAPTER II

REVIEW OF LITERATURE

Being that the Great Recession was so recent, there was a plentiful amount of data available. Since a part of this research wanted to focus on community economics, the amount of information was readily available for that as well. Many individuals debate whether or not the United States has completely recovered from the most recent recession. Depending on what part of the country is being studied the answer could possibly change.

Research describing the departure of large corporations and analysis of the Great Recession has been compiled primarily by economists and financial service professionals. In 2009, Jason Clemens and Niels Veldhuis narrowed down the best ways to compare economic periods. They focused on the decline in economic output, gross domestic product (GDP), length of the recession, and unemployment rates. By looking at GDP, it allows researchers to focus on the decrease in the production of goods and services related to previous periods. Clemens and Veldhuis go on to point out that "the current recession does not compare to the downturns of either 1929-33 or 1945-47 in terms of the decline in economic output". They go on to say that "the current recession looks far more like the downturn of 1957-58, which, was also based on the contraction in credit markets". The main conclusion to be drawn from the article according to Clemens and Veldhuis is that the current recession appears to be the worst since the post-World War II recession.

In a similar study conducted in January of 2010, Ring, Kirk, Peredo, and Chrisman of ET&P studied the role of business networks as a form of entrepreneurship for enhancing rural economic development. They developed a model and propositions concerning the community-level characteristics that may favor or inhibit the formation and success of rural networks in the

United States. They focused on how the social and economic properties of a community affect the formation and success or rural business networks.

Throughout the study, Ring, Kirk, Peredo, and Chrisman made eight propositions.

1. Business networks are more likely to be formed in rural communities characterized by constructive conflict.
2. Business networks are more likely to be formed in rural communities characterized by inclusive social networks.
3. Business networks are more likely to be formed in rural communities characterized by permeable social networks.
4. Members of business networks in rural communities with social networks characterized by constructive conflict, inclusion, and permeability are more likely to effectively communicate than members of business networks in rural communities with social networks that lack those characteristics.
5. Members of business networks in rural communities with social networks characterized by constructive conflict, inclusion, and permeability are more likely to accept a wider range of goals as compatible than members of business networks in rural communities with social networks that lack those characteristics.
6. Members of business networks in rural communities with social networks characteristics by constructive conflict, inclusion, and permeability are more likely to exhibit stronger commitments than members of business networks in rural communities with social networks that lack those characteristics.

7. The economic impact of rural business networks should be positively related to the extent to which those networks allow and enable their members to capture opportunities to export local production or import customers.
8. Successful business networks in rural communities are expected to foster additional business networks and new venture creation within those communities and within or between contiguous communities.

Describing the Business Networks and Economic Development in Rural Communities in the United States to the case of the economic impact in Clinton County, Ring, Kirk, Peredo, and Chrisman conclude that "the study focuses on social attributes of rural communities that influence the formation and development of business networks as well as the opportunities for innovation that can contribute to economic development".

In a study attempted to identify local factors that influence economic growth, Aldrich and Kusmin write in an Economic Research Service Report titled Rural Economic Development – What Makes Rural Communities Grow? They point out that factors are unique to time and place. They mention industries experiencing a boom might be correlated to their products that are increasing in demand. The study goes on to focus on indicators of county economic growth, and then tested those indicators against data for non-metro counties during the 1980s.

The study provides conclusions that show that "local areas are attractive places to live for non-economic reasons, that have low labor costs, and that have fewer people receiving government transfer payments, show clear economic advantages over other places. Most variation in growth is accounted to regional trends, and industrial composition of employment". The most important part of the article in comparison to Clinton County Ohio's case is when Aldrich and Kusmin identify that local initiative plays an important role in earnings growth.

Local factors, according to Aldrich and Kusmin, are “likely to include some of the greatest advantages and handicaps of local development”.

Somnath Basu, assessed probably the most important aspect of economic development and recovery and that is “predicting economic recovery”. Based on Basu’s article in Economics and Investment Management titled Predicting Economic Recovery, Basu states that there is about a “50% chance that someone will predict correctly when and how the economy will recover. Rumors, guesses, optimism, and pessimism abound as stock markets rise and fall, employment goes down by less or more than expected, the price of oil suddenly becomes a leading economic indicator, China starts to show the way out of a recession, interest rates remain low, home sales increase and decrease in tandem, inflation is a problem, and the economy grows as expected or not”. All of these Basu says take a toll, but pundits keep going on.

There are two questions that this article addresses. First, “how does one predict the economy and how sound are the methodologies? Secondly, do we really need a prediction”? To answer the first question, Basu says that “people consider economic indicators using complex models of GDP growth, change in unemployment, trade imbalances, flow of goods and services, etc”. The answer lies within the example. How good are the economic models Basu asks. The answer? Not, very. To answer the second question on do we really need a prediction, Basu gives the readers an interesting response. Basu states, “when it comes to reading about predictions, we continue to play the lottery with hope of a windfall. Finding people with all the answers is as difficult as winning the lottery. The windfall will make is richer, but will it make us better or happier”?

CHAPTER III

CLINTON COUNTY 1990

This analysis is broken up into three main sections. The first part is going to take a look at Clinton County in the year 1990. The second part is going to look at the year 2000 and the third is going to look at the year 2010. During the results chapter, conclusions will be drawn from what is being discussed in chapters III-V. These years were chosen because they would give a ten-year time span into the look of Clinton County's economy. During these times the county saw fluctuations in farm earnings, agricultural services, mining, construction, manufacturing, transportation, wholesale trade, retail trade, finance, insurance, and real estate, services, and government and government enterprises. These will be referenced throughout the paper as sector percentages. These earnings by place of work will be examined through information collected from the Bureau of Economic Analysis. It should be noted that the Bureau of Economic Analysis changed data categories between 2000 and 2001. The data collected for 2010 has been altered to resemble that of 1990 and 2000.

Figure 1. illustrates Clinton County 1990 sector percentages. Farm earnings and agricultural services, forestry, and fishing/mining make 5.34% of the regional economy. Compared to *figure 2.* 2000, farming earnings and agricultural services, forestry, and fishing combined made 1.91% of the county's economy for a difference between the ten years of 3.43%. Farm earnings did recover a slight bit to 2.93% for 2010 as *figure 3.* shows. The largest sector in 1990 was manufacturing at 29.74%. In the year 2000, manufacturing was 19.1%. Over the ten year time span manufacturing decreased by 10.64%. However, in 2010 manufacturing saw an increase by 2.07% to 21.17% of the county's economy.

Over the 20-year time span of the study, manufacturing was the dominant sector. According to *figure 2.* mining/transportation and public utilities was the highest sector percentage. For the year 2000 this is true. However, some data collected by the Bureau of Economic Analysis comes back as confidential information. This means that a total for that sector was not reported. When this happens the missing sector is matched up with another missing sector and their value is found by adding up all other sector values and subtracting it from the total earnings by place of work. Since this happened for 2000, mining/transportation and public utilities had a larger value. If this were not the case and a value would have been provided, manufacturing would have been likely to remain the top sector percentage for Clinton County for the 20-year study.

When looking for the smallest sector percentage in Clinton County, a challenge once again occurred. For the year 1990, according to *figure 1.* the smallest sector was agricultural services, forestry, fishing, and mining. *Figure 2.* showed that agricultural services, forestry and fishing was the smallest sector. For the year 2010, *figure 3.* showed that mining was the smallest sector percentage. Agricultural services, forestry and fishing was the smallest sector in 1990 and 2000 but in 2010 due to data collection from the Bureau of Economic Analysis, mining information was collected and shown with a value of 0.08%.

1990 was an interesting study because the largest discrepancy was between manufacturing at 29.74% and agricultural services, forestry, fishing, and mining at 1.10%. The difference between these two sectors was a percentage value of 28.64. The remaining sectors found in *figure 1.* all remained relatively close together. This means that all the remaining sectors had a reasonably equal portion of the earnings by work place during the 1990 study.

CHAPTER IV

CLINTON COUNTY 2000

Figure 2. shows that the largest sector proportion for Clinton County in the year 2000 was mining/transportation and public utilities. Manufacturing, which was the highest sector percentage for 1990, is now second with 19.19%. Mining/transportation and public utilities was such a large portion of the economy in 2000 because this data had to be consolidated into one sector due to lack of data provided much like in the 1990 case for mining.

Clinton County was built on manufacturing. In the center of town there are three large companies devoted to manufacturing. One is making drill bits, another is producing plastics for home decks, and the third is a bridge constructor. The smallest sectors are agricultural services, forestry, and fishing, and farm earnings. Agricultural services, forestry, and fishing only make up 0.20% of the local economy. Farm earnings come in next with only 1.71% of the local economy. This is surprising because it seems that the majority of Clinton County is agricultural farmland. However, only production agriculture is counted. Even though it may seem like some rural counties are just one big farm. But since all of the other aspects of agriculture aren't included, it should not come as such a shock that it was low.

Over the time period of 1990 to 2000 there are some note worthy changes in sector percentages. It is important to look at what sectors provide the most jobs. Construction, government and governmental enterprise and manufacturing are the area that will employ the most workers. In 1990, construction made up 3.43%, government and governmental enterprises made up 14.16% and manufacturing made up 29.74%. Between those three sectors 47.33% of the economy is made up. Just shy of half of the counties economy is located in three sectors. When the year 2000 came, the numbers did not improve.

Instead of the same three sectors that hold the most half of the counties employment, the same three sectors now only comprise 33.5% of the economy. Each one of the economic sectors fell in what percent they held in the economy. In fact, only one of the sectors saw growth from 1990 to 2000, finance, insurance and real estate. It saw a slight increase of 1.74%, now up to 4.09% according to *figure 2.*

As chapter 1 noted, one of the largest employers in the county (DHL) left the area in 2009. Between the period of 2000 and 2010, Clinton County saw a large growth in employment and a large increase in unemployment, both contributed to the same cause, DHL.

In 2003 DHL acquired the Wilmington airpark. Prior to 2009, the airpark that DHL was about to occupy had been home to many companies. The largest one was the United States Air Force. It began as a small airport and in 1942 the Army Air Corps took over control of the small airport and transformed it into a full military base. After World War II the base was closed down until the Korean War. From that time until 1972, it remained a fully operational air force base. Post Army Air Corps, “the base”, as local residents called it, transformed from local school classrooms to a shipping hub used by Airborne Express. Airborne Express was much like DHL except on a much smaller scale. Not since the Army Air Corps, the base had not had a significant economic impact on Wilmington until DHL decided to make it its new home in 2003.

In May of 2008, DHL announced that it would be abandoning operations in Wilmington Ohio and be relocating its main hub of operations. Those 8,000 jobs that were brought into the community in 2003 were dwindled down to just a few hundred workers by the end of 2009.

In 2008, the United States went into a state of recession. The overall markets from the job market, to the stock market, to the housing markets went through ups and downs since the recession began. Officially the recession ended in June of 2009. In Clinton County, the local

government still struggles to support citizens that are still out of work five years since DHL's relocation. Citizens have resorted to their savings accounts and retirement accounts just to make ends meet. The housing market in Clinton County still is not to prerecession levels. People that once had promising jobs and planned portfolios were forced to sell their dream homes and downsize.

All of this information is crucial to the 2010 values. As stated, the recession ended in June of 2009. Some economies were able to restructure themselves and revert back to pre recessionary times. Some on the other hand, were not able to revert back as quickly. It all depends on the job market. The stock market has returned and is making promising growth but many people lost what was in the stock market so in the end that will not be an accurate representation of the resurgence of the American worker.

CHAPTER V

CLINTON COUNTY 2010

The final portion of this study observes Clinton County in the year 2010. 2010 is a crucial year because this is the first year observed after the global recession. The United States average unemployment rate for 2010 was 9.6% (Databases, Tables & Calculators by Subject). Clinton County average unemployment rate for 2010 was 16.25% (Databases, Tables & Calculators by Subject). The unemployment rate for Clinton County was just shy of being three quarters more than that of the national average.

Figure 4. shows the number of citizens that were unemployed in Clinton County. Before the recession of 2008, the number of unemployed citizens in 2007 was 1,100 and in 2008 was 1,400. Once DHL had announced that it was relocating and with the impacts of the recession, the number of unemployed citizens jumped from 1,400 in 2008 to 3,000 in 2009 and 3,200 in 2010. It was not until 2011 that the county saw a drop in the number of unemployed citizens. In 2011, the number of unemployed citizens was 2,400 and 1,800 for 2012. However, another important variable that is included in *figure 4.* is the amount of workers in the labor force. From 2007 to 2012 the labor force declined. In 2007, the number of workers in the labor force totaled 24,200. In 2012, that number had fallen by 7,000 to 17,200. The workforce was not able to support themselves with what the local economy had to offer. Like people all around the country, they relocated to where potential employment was more promising.

Referring to *figure 3.*, manufacturing was the largest economic sector for Clinton County. Manufacturing comprised 21.17% of the counties economy. The smallest sector in the economy was mining, only making up .07% of the economy. What was the one of the largest sector growths was seen in government and government enterprises. Where as in 1990 it only

comprised 14.16% and in 2000 it was 11.78%. In 2010, government and government enterprises grew to the second largest sector in Clinton County's economy with 21.02%.

When completing an analysis of a local economy, it is important to look into income data pertaining to economic sectors. *Figure 5.* shows income data for Clinton County from 1969-2000 and *figure 6.* shows income data for Clinton County from 2001-2012. These values were charted by taking sector percentages and comparing them over time in a time series chart.

Figure 5. is interesting because it allows economists to see Clinton County at a glance. Between the seven sectors that are measured, unearned income, agriculture, goods, utilities and wholesale, retail finance services, residence adjustment and government, viewers can analyze which sector has grown and which sector has fallen over a period of time with just one chart.

Two specific cases stand out in *figure 5.* One is the unearned income which grew by 10%. There are two types of income. Earned income, which is money received from wages from the individuals' place of employment. The other type of income, which is shown in *figure 5.*, is unearned income. Unearned income is any other type of money that one may receive. Unearned income saw the greatest increase beginning in year 12. This increase in unearned income was sustained until year 16. After year 16, the growth in unearned income began to fall with slight increases over time to where the chart ends in 2000.

The second case that stands out in *figure 5.* is residence adjustment. Residence adjustment began in 1969 with a value of .08%. When the chart ended in 2000, residence adjustment fell to negative 0.17%. Residence adjustment is looking at those individuals who are not permanent residences of the specific county under study.

It can be seen in *figure 5.* that the remaining five categories did not see as much fluctuation in their income values as much as the values of unearned income and residence

adjustment. Perhaps the only other two sectors that saw a dramatic change were utilities and wholesale and government. Utilities and wholesale grew from a value in 1969 of .05% to a 2000 value of .17%. Government income did not see the same growth as utilities and wholesale. In fact, government saw a decrease. In 1969, government had a value of .20% and finished in 2000 with a decreased value of .11%.

Figure 6. is a mirror image of that of *figure 5.* The Bureau of Economic Analysis changed data collection methods in the year 2001 and thus resulting in two different charts. The data collected has been edited to report the same findings as if *figure 6.* would be a part of *figure 5.* *Figure 6.* shows income data for Clinton County from 2001 to 2012. The measured categories are the same in *figure 6.* as they are in *figure 5.*

The trend of residence adjustment being negative still continues throughout *figure 6.* However, the value for residence adjustment is closer to being toward the positive instead of being in the negative. In year five of *figure 6.* it can be seen that residence adjustment has an increase in income. This growth trend continues until the end of the chart where it finishes with a value of -.03%.

As residence adjustment grew, utilities and wholesale continued to fall. Starting in 2001 with a value of .63%, utilities and wholesale fell to its 2012 value of .15%. Much like the values from *figure 5.*, *figure 6.* saw its remaining categories have a limited growth or decrease within the time span of the *figure 6.* study.

CHAPTER VI

CONCLUSION

This research was completed for an economic analysis of Clinton County Ohio. The results of the study indicate that DHL's greatest impact to Clinton County was the dynamic change in the labor force. The typical county does not experience job loss of this magnitude. Every county, in every state around the nation suffered similar consequences from the Great Recession. This study focuses on one particular region that suffered more than the average American town. More than 8,000 people lost their jobs when DHL ended operations in Clinton County. To this day, Clinton County is still one of the highest unemployed counties in the state of Ohio. Clinton County is ranked 13 out of 88 counties. According to the Ohio Labor Market Information, Clinton County's unemployment rate for August of 2014 was 6.7% with the highest unemployment being Monroe County with 10.7% (2014).

Businesses from across the country have expressed interest in locating to the area. Some smaller companies have relocated to what once was DHL's airpark but the number of jobs provided is currently far from what was provided prior to 2009.

Using the data collected, the economic developers could determine more accurately the impact job loss has on other counties and what economic sectors would be the best for potential development and growth. The findings would constitute further evidence that community leaders should strongly examine incoming business enterprises into a region and an exit strategy should be contemplated as well to decrease a situation like what happened in Clinton County from happening again.

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APPENDICES

APPENDIX A

RELATED FIGURES

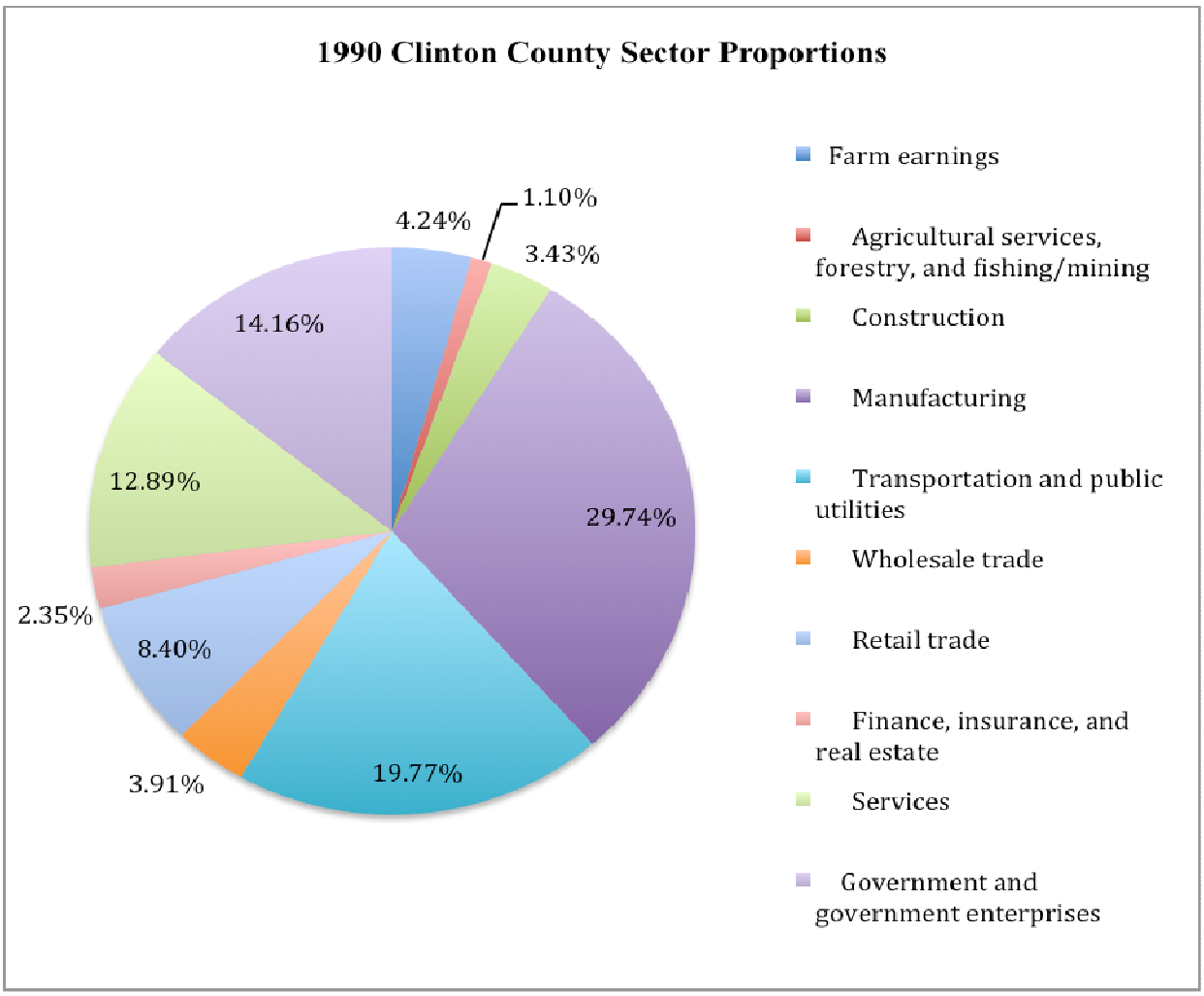

Figure 1. 1990 Clinton County Sector Proportions

Note: All data utilized in constructing the graph above is from the Bureau of Economic Analysis "Regional GDP & Personal Income" data, gathered from BEA.

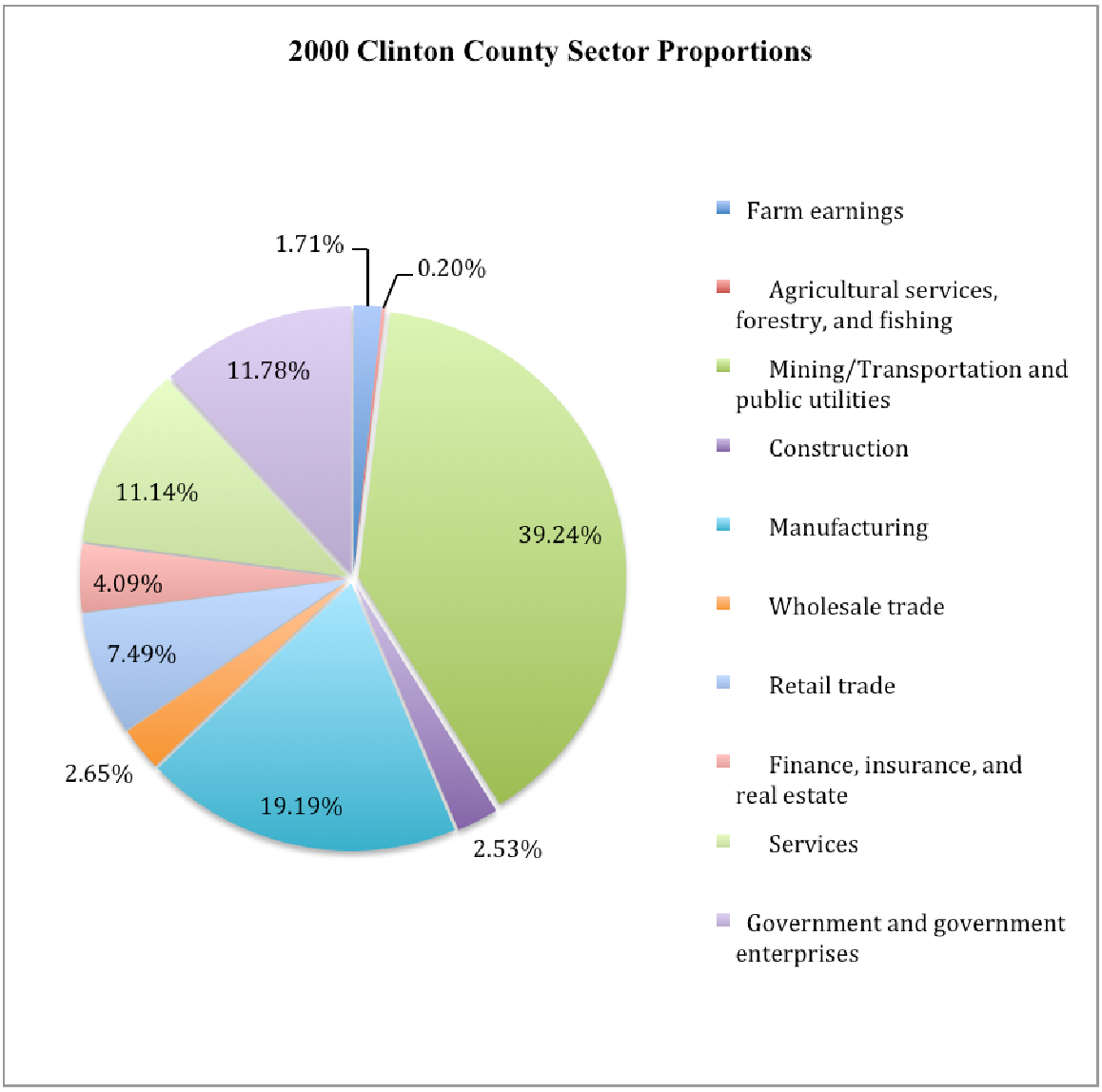

Figure 2. 2000 Clinton County Sector Proportions

Note: All data utilized in constructing the graph above is from the Bureau of Economic Analysis "Regional GDP & Personal Income" data, gathered from BEA.

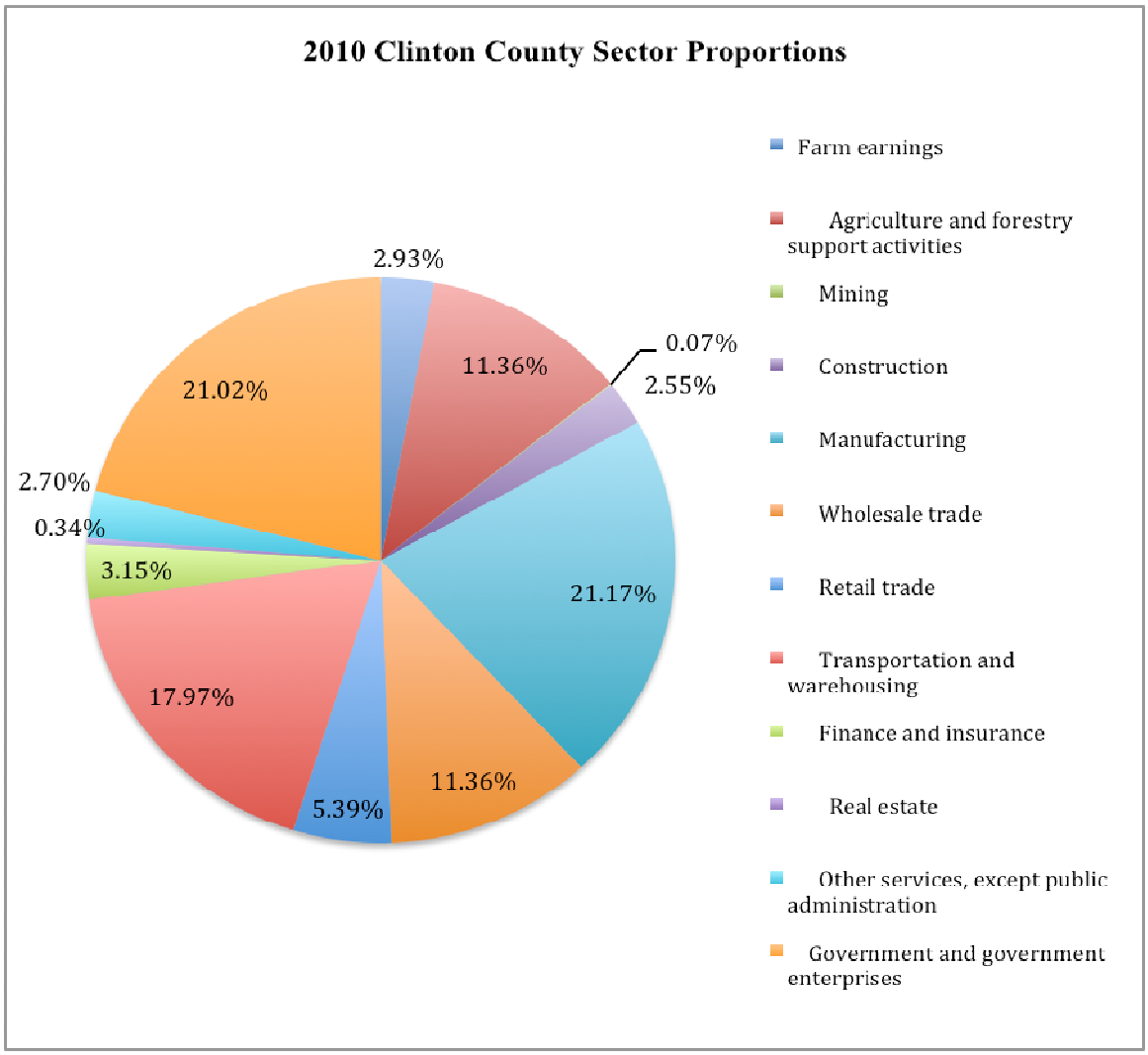

Figure 3. 2010 Clinton County Sector Proportions

Note: All data utilized in constructing the graph above is from the Bureau of Economic Analysis "Regional GDP & Personal Income" data, gathered from BEA.

Year	Unemployed	Labor Force
2007	1,100	24,200
2008	1,400	23,200
2009	3,000	21,100
2010	3,200	19,400
2011	2,400	18,100
2012	1,800	17,200

Figure 4. Clinton County Unemployment / Labor Force Table

Note: All data utilized in constructing the chart above is from the Statistical and Demographic Data Clinton County 2013, gathered from the Ohio Department of Job and Family Services.

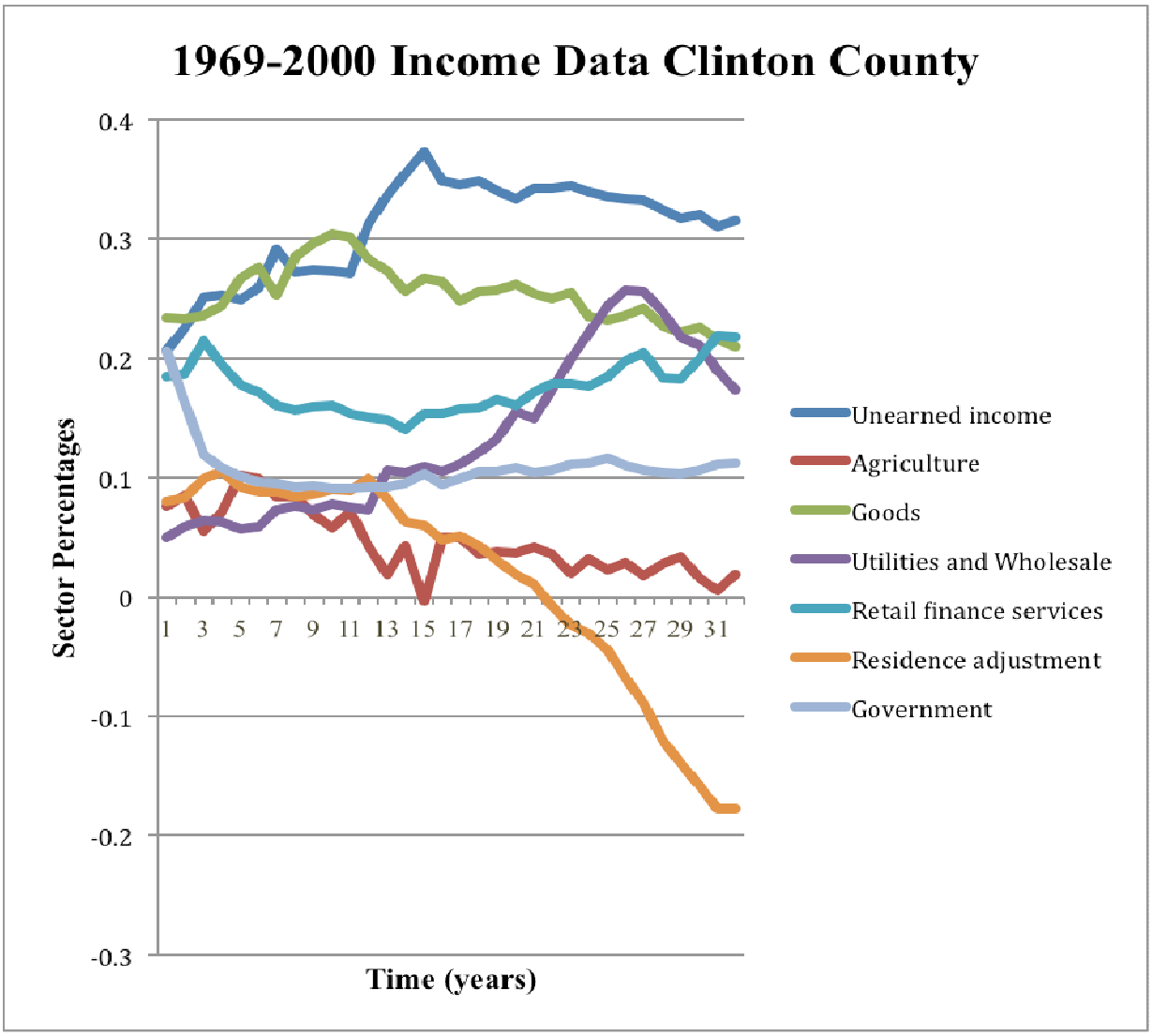

Figure 5. 1969-2000 Income Data for Clinton County

Note: All data utilized in constructing the graph above is from the Bureau of Economic Analysis "Regional GDP & Personal Income" data, gathered from BEA.

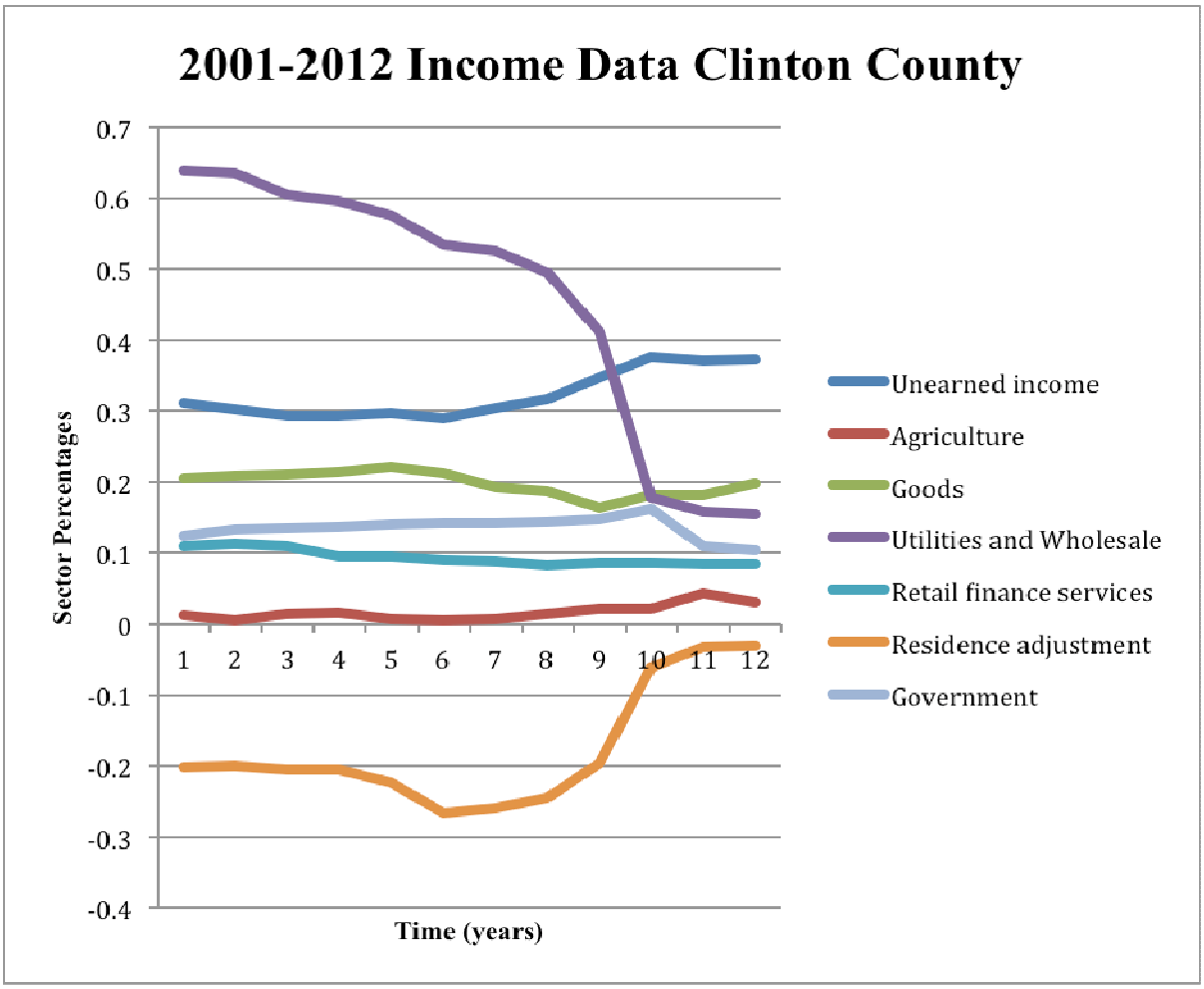

Figure 6. 2001-2012 Income Data for Clinton County

Note: All data utilized in constructing the graph above is from the Bureau of Economic Analysis "Regional GDP & Personal Income" data, gathered from BEA.

VITA

Graduate School
Southern Illinois University

Chadwick W. McKay

chad.mac_10@yahoo.com

Wilmington College
Bachelor of Science, Agriculture, May 2013

Research Paper Title:
The Regional Economic Analysis of Clinton County Ohio

Major Professor: Ira J. Altman